

Region-Wide Hot Issues

TOPIC TITLE: Ensuring Drinking Water does not exceed Health Advisories for PFAS Compounds, summary of Region-wide issues. Please see state-specific site details under each state heading.

LEAD: WMD=Rick Rogers HSCD= Steve Hirsh EAID= Cindy Caporale

SUMMARY: Over two dozen municipal water supply wells and hundreds of private drinking water wells have been contaminated with perfluorinated compounds (PFAS) at levels exceeding EPA Health Advisories. Most of the contamination can be linked to DoD firefighting activities or a Dupont manufacturing facility. Most issues are in Pennsylvania and West Virginia; less widespread contamination has been found in Virginia and Delaware. HSCD and WPD supported by EAID have taken actions under CERCLA and the SDWA to ensure response actions have been taken to provide alternative drinking water or treatment of contaminated wells as necessary and appropriate. Additional sampling and studies are ongoing. Over the next couple of years response actions will be selected and completed to address contaminated media and drinking water. The Administrator has established a Cross-Agency PFAS Coordination Committee led by the ORD Science Advisor evaluating EPA needs relative to PFAS contamination. The R3 RA assisted by Rogers, Hirsh and Caporale participates in the PFAS Coordination Committee.

Pennsylvania

Topic Title: PFAS Sites: Warminster/Willow Grove Former Naval Air Bases.

Lead Division/Office(s): WPD/ODWSWP and HSCD/OFFR

Contact Person: Roger Reinhart (WPD); Steve Hirsh (HSCD)

Summary: Warminster Navy and Willow Grove (which includes separate ANG and Navy bases), are NPL Federal Facilities located within 5 miles of each other on the border of Bucks and Montgomery County, PA. In 2013-2014, PFAS was detected in several wells surrounding the bases. In 2014 and 2015, a Safe Drinking Water Act (SDWA) Order was issued for Warminster Navy and Willow Grove ANG, respectively, to investigate and eliminate exposures to PFAS. At all bases, the Navy and ANG are providing treatment on the public supply wells above the HA and providing alternative water supply to all residents with wells above the HA. The contamination has affected 16 public supply wells in 3 counties. To date, the ANG and Navy have sampled approximately 1,000 private drinking water wells in 7 counties and are in the process of connecting all homes above the HA to public water. Investigations to determine the nature and extent of the PFAS contamination are underway at all three sites. (Interim remedial measures include turning on existing groundwater extraction system at Warminster Navy and installing treatment system on Willow Grove ANG storm water basin.

West Virginia

Topic Title: PFAS Sites: West Virginia Underground Injection Control State Program Revision and Approval.

Lead Division/Office(s): WPD/ODWSWP

Contact Person: Jim Bennett, Ground Water and Enforcement Branch.

A citizen from West Virginia is questioning West Virginia's UIC primacy program for Class II and Class III waste injection wells. When Primacy was granted, the Division of Water Resources (DWR) had permitting responsibilities for all Class II permits. At some point in the 1990s, WV transferred this program from DWR to the WV Department of Environmental Protection (DEP). Since then, Class II permits have been written and issued by the Office of Oil and Gas, in DEP. The citizen contacted EPA directly asking for us to provide documentation of EPA's approval of the transfer of authority. The transfer of a program from one state agency to another is a substantial program revision; therefore, EPA is required to approve this transfer. This includes issuing public notice through direct mail to interested persons, publication of notice of intent to approve the program revision in the Federal Register and the largest newspapers in the state, and to provide an opportunity to comment for a period of at least 30 days before the revision is effective. Documentation of formal acknowledgement by Region 3 of these transfers of authority is not available. Although EPA approved the original primacy package, the regulations were never codified in the Federal CFR. The Region is working with the HQs UIC Program and Office of General Counsel on a recommended path forward for both the short-term response to the citizen and the long-term approval and codification process.

Topic Title: PFAS Sites: DuPont/Chemours Washington Works Plant PFOA contamination of public and private drinking water supplies and possible GenX contamination

Lead Division/Office(s): WPD/ODWSWP

Contact Person: Roger Reinhart, Ground Water and Enforcement Branch.

PFOA

DuPont manufactured Teflon at its Washington Works plant near Parkersburg, WV for many years. Perfluorooctanoic Acid (PFOA) was released to the surrounding air and water environment during the manufacturing process. The PFOA released through air emissions deposited in surrounding areas mostly in the direction of prevailing winds into Ohio and West Virginia. The contaminant percolated through the soil into the ground water contaminating over one dozen public water supply wells and hundreds of private drinking water wells. Region 3 issued an emergency order under the Safe Drinking Water Act in 2009 that required DuPont to determine the extent of the contamination and provide a permanent, safe supply of drinking water (treatment or in the case of private wells not near a public water supply, whole house filtration treatment) to any water source above EPA's Health Advisory for PFOA. DuPont's spin-off, Chemours, is now responsible for the site and is expanding its area of investigation by sampling additional wells further from the plant. Chemours must also test the efficacy of the filtration treatment that they have installed on public water systems and private wells for the foreseeable future.

GenX

In its manufacturing of Teflon at the Washington Works facility DuPont started using GenX sometime around 2012 – 2013 as a replacement compound to PFOA. While the two compounds are similar in some ways, GenX, (unlike PFOA) clears from the body very rapidly. A 2009 EPA consent Order issued under the Toxics Substances Control Act (TSCA) with DuPont in consent required the company to recover or destroy at least 99% of GenX in its emissions at Washington Works. A consent Order between WVDEP and DuPont (now Chemours) issued in 2011, allows Chemours to discharge GenX in its wastewater so that levels at after the mixing zone do not exceed 17,500 ppt. A sampling event conducted in the summer of 2016 as a part of an ORD sponsored study in WV and OH identified GenX in concentrations as high as 129 ppt in nearby surface water bodies, which indicates GenX could have been released through air emissions. If so, it is possible that GenX has also contaminated ground water like PFOA releases have done. DuPont has conducted several toxicity studies on GenX and finds it to be considerably less toxic than its predecessor PFOA. However, this finding has been challenged by other scientists who believe that more research needs to be conducted. There is also considerable concern about other PFAS compounds related to GenX which have been identified in the Cape Fear River, downstream of the Fayetteville, NC facility where Chemours manufactures GenX and in the ground water on the Fayetteville property. Some of the analytes have been measured at levels much greater than GenX. EPA has not yet established a drinking water regulation or health advisories for GenX or any of its analytes. North Carolina established a health goal of 140 ppt in drinking water.